

SANITARY COMMISSION.

NO. 24.²

General Instructions to Sanitary Inspectors.

NOTE.—It is assumed that the Inspector to whom this is addressed has undertaken to systematically visit a certain section of the army, (either one of the military departments, or a subdivision of a department.) A copy of the *Army Regulations*; of a *Report on Military Hygiene and Therapeutics*; and of the Commission's *Rules for Preserving the Health of the Soldier*, will have been furnished him, with the contents of which he is supposed to be familiar. The section of the army is supposed to be mainly in a state of rest, and in camp. If it is in movement, or about to move, or if an engagement is immediately anticipated, or has just occurred, and the officers are therefore likely to be occupied with matters of an unusual and peremptory character, the duties of the Inspector to which these instructions refer must be mainly suspended. Precisely where or how far at such a time it would be judicious to act under them, it must be left to the discretion of the Inspector to determine.

OFFICE OF THE SANITARY COMMISSION,
Treasury Building, Washington,

To _____

SIR: You will, in the first place, proceed, if practicable, to the head-quarters of the portion of the army which you are to visit, and present your credentials to the General commanding. Having explained to him the objects of your visit, you will request from him such endorsement or aid as will be necessary to your intended further proceedings. It is desirable that you should then see the Medical Director and Medical Purveyor, and other superior medical officers of the troops with which you have to do, explain to them your objects, get from them such general

information as may be desirable, and gain their favor for your purposes. To this end it is chiefly necessary that you make them understand that you will co-operate with and aid them, by helping to remove difficulties which arise from the ignorance and inexperience of the volunteer surgeons.

If the regiments which you are to visit are brigaded, you should also pay your respects to the brigade commander, or the commanding officer of the post, before calling on the regimental officers.

It is required of you, in all cases, in like manner, to show your respect for the regulations for the discipline, order, and rank of the army, as far as practicable, by approaching the inferior by way of the superior officer, and only with a formal or implied approval and endorsement of your purpose by the latter. Unquestionably, the first of all conditions of health of the army is strict discipline. Do all, therefore, in your power to encourage and strengthen a good purpose in this respect; do all in your power to sustain it. Honor in your own conduct the strictest rules of military etiquette, and let it be seen that you expect them to be stringently enforced. Let it be known that you consider no disease so destructive to an army as laxity of discipline. Demand, wherever you properly can do so, that the standard of the volunteers shall be at least as high as that of the regulars in this respect, and reprove any intimation that this is not to be attempted.

On arriving at the camp of a regiment, (supposing that no officer has been detailed by the general to escort you,) ask for the officer of the day, and, stating your business, request him to present you to the colonel or commanding officer of the regiment. Exhibit to the latter your credentials, and, if the opportunity is favorable, endeavor at once to obtain his confidence and co-operation in your business. Be careful that he understands that your office is not to interfere with his, but to aid him in preserving his men from demoralization and loss. Request him to introduce you to the captains, or to send another officer to do so, and endeavor in the same manner to establish a friendly acquaintance with them. At the same time, scrupulously avoid placing yourself on terms with them, or under any obligations,

which you may feel will embarrass you in the exercise of your duties.

The most dangerous idea is often held by volunteer captains of the functions of their office, it being derived apparently from the custom of the militia in peace; when the privates are living at their homes, and the captain has little other duty than to see to the drill of the men and marshal them on parades. In our military organization the company is the unit of the army, and the commanding officers of companies are the principal agents of all the administrative duties of the organization. If a major or lieutenant (not acting as a commander) neglects his duties, the body to which he is attached becomes simply in a certain degree less effective. If a company commander neglects his duty, the men may starve for all that any one else is to do. The captain should be, as has often been said, "the father of his company." Nothing, however small, which affects the comfort, health, strength, and efficiency of his men is beneath his attention. He is the official registrar, and agent of all necessary communication between them and the source of their supplies, as well as with the superior command. He must leave the drill of his company chiefly to his subalterns and non-commissioned officers, for if he pays all necessary attention to his administrative duties, he will have no time to give more than a general superintendence to a task which, in its detail, involves but little exercise of judgment. Upon the thoroughness with which the captains attend to their duty, both in regard to their companies, and, each in his turn, as the officer of the day, superintending the police of the regiment, its health mainly depends. You are, therefore, instructed to make yourself acquainted with the captains, and to cultivate such relations with them as will command a hearty reception for such instruction as you may see occasion to give them.

If necessary, you will point out to them the danger to which men in service are exposed by neglect of sanitary laws, and impress on them the great practical importance of the work with which you are charged. To do this effectively, you should be prepared with a few statistical facts from military history, as, for instance, with the proportion of deaths from disease to deaths from casualties of battle during our Mexican campaign, (more

than 7 to 1.) See also statistics of the Crimean and other campaigns in the *Report on Military Hygiene and Therapeutics*.

Proceed to thoroughly scrutinize the camps, visiting the tents of one company after another; if possible, having the captains of each with you, as you examine it. Do not too much hasten this part of your work, as it will probably be your best opportunity of serving the cause in which you are engaged. The questions of the "Camp Inspection Return," with which you will have been furnished, indicate the more important points which should engage your attention. You are not required to write answers to these questions while walking through the camp; yet it will be best to address most of them, and especially those from 21 to 57, to the company officers, noting their answers, and letting them see that you do so on the "Return;" which thus answers the purpose of a memorandum of matters in which it is generally desirable that instruction should be given. You can afterwards write the answers which, in your judgment, best convey the general facts in question, in ink upon the "Return," and retain this copy as your private memorandum, copying from it upon another sheet for your Return to the Commission. The chief advantage of making your investigation in this manner is the inoffensive mode which it offers you of calling the attention of the officers to the particulars in which they will be found (generally through ignorance) to have neglected their regular duties. Probably in nearly all cases you will be able to trace whatever is wrong (sanitarily considered) to a neglect of some of the requirements of the Regulations, as, for instance, to ¶ 88, which demands of captains "the utmost attention to the cleanliness of their men, as to their persons, clothing, accoutrements, and equipments, and also to their quarters or tents," or to ¶ 111, which requires captains to attend carefully to the messing and economy of their respective companies; to visit kitchens and inspect kettles daily, and colonels to make frequent inspections of kitchens and messes; or ¶ 96, which requires non-commissioned officers to see that all the privates properly wash their hands and faces, and comb their hair.

Endeavor by every means in your power to remind the officers of these orders, and of the necessity of their strict obedience to them, to the safety and credit of the regiment. Explain to them

that they are based upon a universal military experience, that disastrous consequences inevitably follow the neglect of such precautions as they are intended to secure. Let them know that, although the outbreak of malignant or epidemic disease in camps and quarters can be almost certainly prevented, it can seldom be suppressed after having once broken out, by any measures however energetic, and never without great destruction of life. Point out to them the various sources of mischief that are to be anticipated, and explain in what way defects in camp-police, ventilation, drainage, cooking, water, &c., are sure to operate injuriously, especially in the destruction of the *esprit du corps* and *morale* of the soldier.

From an examination of the tents of each company, pass to its kitchen. Examine the cooking utensils, the fuel—which is generally extravagantly wasted—the rations which have been drawn, and, if there is an opportunity, taste the cooked food, and criticise the cooking. Endeavor to stimulate an ambition to make wholesome and palatable food with the existing rations, by a skillful method of cooking with the simple utensils furnished by Government and the camp fire. Every soldier should be a good camp cook, and he is not a good camp cook who requires a cooking stove or a large assortment of utensils. As a great variety of cooking stoves intended for camps are in use, when you meet with these, it will be well to notice the relative value of the different patterns as tested by experience. But do not encourage the opinion that any of them, or anything not provided for by Government, is necessary to the comfort or efficiency of the soldier. Foster a spirit of simplicity, frugality, and hardihood in this as in all things.

Subsequently, you will call on the quartermaster and commissary, and investigate the method of making requisitions, (these should come from the captains in the first place, and be “consolidated” by the colonel: see forms 13 and 14, Army Reg., p. 228;) of receiving and accounting for supplies; of dividing the rations for companies; of subdividing for individuals; and again, of dividing with reference to time, (so that ten days’ allowance shall not be exhausted in nine, &c.) If you hear complaint of insufficient food, look closely at these points, for it is

unquestionable that, with honesty and a moderate degree of providence, there will always be more than enough. Ascertain if company funds have been formed. (See ¶ 197, Army Reg., page 27.) Unless the regiment has been recently much on the march, the want of company funds affords in itself strong presumptive evidence of knavery or of incompetency of officers. This incompetency, however, is generally merely the result of ignorance and inexperience. You may therefore hope by your instructions to remedy it.

It is not necessary that the whole of the camp should be visited the same day; and it will be better, if any of the captains are absent, to pass on to general matters, as the sinks, the stables, and the shambles, or to some other regiment, and return at another time, rather than fail to obtain the attendance of each captain in your examination of the tents and the kitchen of his company.

Give attention to the sutler's store. A sutler should be engaged for each regiment, and the regulations prescribed in the Articles of War (Art. 29) and the Army Regulations (¶ 202 to 209, p. 28,) stringently enforced upon him. He should be required to keep every essential article for a healthy soldier's comfort, not provided by the quartermaster, such as brushes, blacking, needles and thread, pipes and tobacco, and he should not be allowed to offer anything likely to prove unwholesome to the men, such as green fruit and leathery pies. Where diarrhœa prevails, both the sutler and itinerant venders should be sharply looked after in this respect.

Having obtained an introduction in your official capacity to the regimental surgeon, it will not generally be difficult for you to gain his confidence and good will; for your duty will lead you to magnify his office, and if he properly appreciates its responsibilities and difficulties, he will value the service you will be able to render him.

It is the duty of the surgeon to point out whatever is unfavorable to the health of the regiment, and to suggest the proper remedy. You should encourage him to make and to persevere in making such suggestions, and wherever possible, consistently with your judgment, should add the weight of your own influence

to his advice. You may find it necessary to remind the surgeon that he becomes responsible for the existence and continuance of any unjustifiable sanitary condition pertaining to the camp or to the management of the regiment against which he does not perseveringly expostulate.

It is difficult to define the rights and the duties of regimental surgeons, because these vary so much with circumstances. The medical and surgical provision for a regiment on detached service of a special kind should be altogether different from that of a regiment quartered with many others in the immediate vicinity of a general hospital. The regulations were not formed with reference to large armies in the field, and are not perfectly adapted to the circumstances in which our volunteer surgeons at present find themselves. A patient study of their provisions will, nevertheless, disclose the means of remedying most of the difficulties, of which you will hear much complaint. When this is not the case, an appeal may be made to the medical director, or, if necessary, to the major general commanding, who, for a special purpose, can override the restrictions ordinarily placed upon the supply of medical stores and hospital conveniences.

Inexperienced regimental surgeons will generally be found to err in attempting to maintain too complicated and extensive hospital arrangements, and in undertaking to deal with cases for which proper supplies and accommodations cannot be provided, except in fixed general hospitals. There should be nothing in a regimental hospital to stand in the way of sudden and rapid movements; and whenever a cure cannot shortly be expected, patients should be transferred to a general hospital. In some cases, however, this will not be possible; and when you meet with these, you are expected to do all in your power to obtain such supplies as are immediately needed, and which cannot be got by official process. This may be done either by requisition upon the stores of the Commission, by an appeal to local charity, or, when necessary, by a moderate expenditure of money on account of the Commission. Whenever practicable, special authority for this purpose may be requested by telegraph.

Regimental surgeons also frequently err in the opposite extreme, sending patients to general hospital who have some simple

illness which would yield to judicious treatment, even under canvas, in a few days. Experience is needed to enable the judgment to be exercised confidently in discriminating between proper and improper cases for camp treatment, and your opportunities of observation and comparison will stand you in place of an extended experience in this respect. It is your primary duty, as it is that of the regimental surgeon, not to take care of the sick, but to guard against whatever weakens or embarrasses the use of the greatest possible strength of the regiment for warlike purposes. The surgeon's stores, and the hospital, and the ambulance, should all be instruments to the end of the utmost possible rapidity, spirit, and force of movement in the regiment. Discourage whatever really weakens the regiment; encourage whatever tends to strengthen it against the enemy. Oftentimes tenderness to individuals is not true humanity; and the surgeon whose baggage impedes an advance or a retreat may easily be the cause of more suffering than the one who carries the hospital stores for a regiment in a knapsack, or whose medicines and instruments are all conveyed in a pocket case.

The surgeon should be prepared for battle duty. If he has an ambulance, has he a trusty driver for it, and an ambulance corps, upon which he can depend under fire? Do they know how to lift and carry a man with shattered limbs? Do they know that water is more precious than gold to those who follow the track of a battle, and are they instructed how to secure it and administer it providently? Beds and sheets and wine and delicate food in the hospital tent are of little consequence to the regiment compared with these preparations. It is usual to employ the band as an ambulance corps, but it will be of little service unless previously drilled for the duty, and habituated to obey commands from the surgeon.

Having completed your survey of the camp, call again on the commanding officer, and acquaint him, in such a manner as you judge will be most likely to have the desired effect, with whatever you have seen to be important sanitary defects of the camp; question him if they cannot be remedied, or point out the proper remedies. Full and specific directions for this purpose cannot be given you. The Commissioners depend mainly on your general

knowledge of the conditions of health, and upon your ingenuity and tact in so dealing in each case as will under the circumstances best contribute to the desired result. The present instructions have reference only to the more common defects of camps, and to remedies of general application.

With regard to the selections of camp sites, and the proper precautions for the lodging of the men, you will find useful hints in the *Report on Military Hygiene*, p. 10; also in *Rules for Preserving the Health of the Soldier*, ¶ 15, 16, 17, 18, 19, and 20, p. 6.

As experience proves that every camp ground becomes poisoned or malarious (it is supposed from the accumulated emanations from the bodies of the men) after thirty days, at most, of occupation, you will urge on the colonel the importance of frequent changes of position, even if only to a few hundred yards distance, and it may be best for you to indicate a safe and advantageous site to which the camp may be removed. Camp sites lately vacated should in no case be re-occupied. Looking to sanitary conditions alone, a camp site cannot be changed too often. Such change also tends to break up the monotony of camp-life, and improves the moral tone of the men.

In studying the salubrity of a position, you should not neglect to observe the character of the subsoil. Should it be damp or hard and impervious, it will generally be your duty to urge a change of position. If a change for the better cannot be made, you should recommend the most careful drainage without delay. Should the camp be on a side-hill, you will especially recommend catch-water drains above it, and around its sides, by which the flow of water from the upper part of the hill will be effectually diverted.

You will endeavor to secure also in every case the digging of a trench (the deeper the better, but at least six inches deep) around each tent or hut. These trenches should be connected, as far as may be, according to the nature of the ground, with main drains, so as to carry off rain water. They should be made as straight as practicable, as all sinuosities arrest the flow of water, and lead to stagnation. The sides should be cut sloping.

You will urge, if you see occasion, that all drains, (especially those around tents and huts) should be kept clean, and that refuse food, &c., be not thrown into them. If they become offensive, they should be cleaned out at once, and disinfected with lime or charcoal.

As, under the most favorable circumstances, tents must be expected to be crowded, urge the commanding officer, if he has not already done so, to make immediate and, if necessary, repeated requisitions for all the tents to which the regiment is entitled. (See Regulations, ¶ 1034, page 133; "Allowance of camp and garrison equipage.") It will sometimes be in the power of the commanding officer to erect huts for a portion of his command. By this means the number required to lodge in the tents may be reduced.

Both in tents and huts, or citizens' houses occupied by soldiers, if they afford proper shelter, there is generally a deficient ventilation, which is often the parent of much disease. Wherever you find this to be the case, you must endeavor to devise some immediately practicable remedy or improvement, such as cutting square openings in the ends of tents, to be covered with canvas flaps, fastened down when necessary by lacings, or, in a house, opening additional windows, or establishing wooden flues through the building. Where it is feasible, ventilation may be very greatly improved by introducing a lighted lamp or candle into such flue. A Sibley tent may be effectually ventilated by hanging a lantern near the roof. Any large building occupied as a hospital will require immediate attention, and no time should be lost in providing it with perfect ventilation.

In all cases you will visit the privies of the camp, and let it be seen that you regard the manner in which they are formed and kept as most seriously affecting the character of the regiment, as it is sure to have an important relation to its sanitary condition. A proper arrangement of the privies, and the usual method employed in well-organized armies of keeping them, is described in ¶ 14, page 5, of the *Rules for Preserving the Health of the Soldier*.

You will advise that the manure and litter of all horses and cattle be collected, removed from camp and covered with earth,

or burned, at short and regular intervals; and also that the offal of cattle slaughtered near any camp or post be buried at once, and at sufficient depth. See page 13, *Report on Military Hygiene*.

You will observe whether men are in the habit of throwing away refuse food or slops anywhere and at random, or of doing anything else that tends to make the atmosphere of the camp unwholesome. If such practices prevail, you will use every means in your power to put a stop to them.

You will ascertain whether quicklime or sulphate of lime (plaster of Paris) can be readily obtained in large quantities for purposes of disinfection; and if so, recommend its free use. The use of lime is to be especially urged for the whitewashing of hospitals, quarters, &c. If neither of these articles are at hand, you will remember that charcoal (either wood or peat) is among the best and most efficient of deodorizers or disinfectants, and urge that men be detailed to burn a supply of this material, and that it be copiously used.

If the water supplied to the men is impure or unwholesome, you will endeavor to devise some mode of improving it, however rough and temporary—as, for instance, aeration, by letting it fall from one vessel to another, or filtration through a barrel half full of coarsely-powdered charcoal. At the western camps, and in many portions of Virginia, special attention must be paid to this subject. All springs should be carefully cleaned and secured by surrounding them with a barrel, or with masonry. All springs and wells should be inspected from time to time, and be kept always under a guard. Wells should be cleaned out with care, especially in cases of epidemic. They are apt to become foul, from matters carelessly or wantonly thrown into them. They are then fruitful sources of disease.

If you find that clothing or other articles furnished by contract have proved so grossly defective as to indicate fraud on the part of the contractor, you will report all particulars in regard thereto, and will also forward written statements, under oath or otherwise, on which the Commission can determine whether criminal proceedings against the contractor can be instituted with any prospect of success.

You will pay particular attention to the quality of the rations, and the mode of cooking them.

If they are unwholesome from bad cookery, you will point out the defect, and urge its remedy. See ¶ 8, 9, 10, and 11, of *Rules for Preserving the Health of the Soldier*.

Should you find the meal-times of the soldiers less regular than they might be, you will urge the necessity of correcting the evil as far as possible, as it is known to be provocative of diarrhœa and other disorders.

You will keep in view the importance of varying the rations, and of supplying the men with fresh vegetables, as far as practicable.

You will recommend the use of beds of hemlock, pine, or cedar boughs where they can be readily had. If straw be so used, it should be taken to a distance from camp and burned at least once a week.

All plank floorings of tents should be raised at least once a week, and the ground under them covered with lime or charcoal.

Tents should be raised and their interior and floors exposed to direct sunlight every fine day, if possible. They should be struck, turned inside out, and thoroughly sunned, and the plank floors, if any, raised and sunned once a week, at least.

Since men are apt to spend their pay as soon as received thoughtlessly, and to their own injury, forgetting the wants of their families at home, you will consider the feasibility of organizing clubs or associations among them for the systematic saving or remittance of the whole or a part of their pay to those dependent on them for subsistence. And if it be practicable, you will endeavor, with the concurrence of the officers, to get up societies for that purpose in each regiment.

Accompanying your "return" upon the printed form, send to this office a written report of any especial characteristic of the camp of which information will not otherwise have been given, and especially state the more important particulars of the advice which you have given to the regimental, company, or medical officers, and wherein you have been able to be of assistance to them. Report if any of the officers exhibit marked peculiarities

of character or habits, likely to much affect the condition of the regiment, especially if any of them appear to be unusually well or ill qualified for their duties.

If you have found your advice disregarded, and important sanitary precautions persistently neglected, without sufficient military or other reasons therefor, address the proper officer on the subject in writing, stating the grounds of your advice. Take pains to do this in such a manner as not to cause irritation or give offence, and, at the end of the week, send a copy of your letter to this office, together with any answer which may have been given you.

Having made one return for each regiment in accordance with the foregoing instructions, a record of subsequent visits should be made in the form of a diary. In this, all important changes which have occurred since previous reports should be noticed; and especially it should be stated whether and how far advice previously given has been followed, and with what results. This official diary should be kept on foolscap sheets, with a wide margin, so it can be bound with others, and should be transmitted to this office weekly, together with a concise general report of the sanitary condition of the department, including a statement of the prevailing diseases and tendencies of disease. It is not required that this report shall be accurate, but that it shall express the result of your judgment upon the information which has reached you.

Whenever you see occasion, advise action which you think desirable to be taken by the Commission or to be initiated at Washington. On urgent occasions, communicate directly with the Governors of States or other authorities, sending copies of your communications to this office.

Your obedient servant,

FRED. LAW OLMSTED,

Secretary.